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OTHER PROGRESS REPORTS

Progress of Working Group I towards the IPCC Fifth Assessment Report

(Submitted by the Co-Chairs of Working Group I)

PROGRESS REPORT OF WORKING GROUP I

Submitted by the Co-Chairs of Working Group I

1. Summary

The following is a report on the activities of WGI since IPCC-XXXVIII in April 2014.

Recent key activities for WGI, in chronological order, have been:

- Participation in the Core Writing Team Meeting for the Synthesis Report of the IPCC Fifth Assessment Report, April 2014;
- Printing of the Working Group I contribution to the IPCC Fifth Assessment Report Frequently Asked Questions brochure, April 2014;
- Completion of the WGI Questionnaire for WGI AR5 Authors and Review Editors, April 2014;
- Presentation of the Working Group I contribution to the IPCC Fifth Assessment Report to the scientific community in Vienna at the European Geophysical Union, April 2014;
- Presentation of the Working Group I contribution to the IPCC Fifth Assessment Report to the 40th Session of the Subsidiary Body for Scientific and Technological Advice (SBSTA), June 2014;
- Presentation of the Working Group I contribution to the IPCC Fifth Assessment Report to the WMO Executive Council during the Sixty-Sixth Session (EC-66) in Geneva, June 2014;
- Participation in the Fourth Core Writing Team Meeting for the Synthesis Report of the IPCC Fifth Assessment Report, July 2014;
- Translation of the Working Group I contribution to the IPCC Fifth Assessment Report Summary Volume into the UN languages, July 2014;
- Contribution to the Final Draft of the Synthesis Report of the IPCC Fifth Assessment Report, August 2014;
- Completion of the IPCC-WCRP Workshop “IPCC AR5: Lessons Learnt for Climate Change Research and WCRP”, September 2014;
- Presentation of the Working Group I contribution to the IPCC Fifth Assessment Report to world leaders in New York at the UN Climate Summit, September 2014;
- Preparation for the adoption of the IPCC Fifth Assessment Report Synthesis Report and the approval of its Summary for Policymakers, October 2014;
- Outreach and communication activities in support of the Working Group I contribution to the IPCC Fifth Assessment Report and the Synthesis Report (on-going).

2. WGI Questionnaire for WGI AR5 Authors and Review Editors

On 25 April 2014, the IPCC WGI Co-Chairs and Technical Support Unit invited all WGI Coordinating Lead Authors, Lead Authors and Review Editors to complete an online questionnaire about their experience of working on the WGI contribution to the IPCC Fifth Assessment Report, their views on the scope, size and frequency of IPCC assessment reports, the scale of the task, the assessment process itself and cross-WG interactions. The questionnaire contained a combination of multiple-choice, scaled and open-ended questions that allowed the authors to critically assess their experience in the activities of the last four years and to express their opinions about future assessments. It was anticipated that the results and feedback received would not only provide valuable learning for the next IPCC Co-Chairs and TSUs working with the WGI community, but also help inform the work of the IPCC Task Group on the Future of IPCC.

All responses were anonymous with the identifying information limited to chapter, role and country of residence. WGI Bureau members were requested to fill in the questionnaire considering their role as an RE, rather than their broader Bureau role. A total of 172 questionnaires were submitted, which is 67% of the combined total for the chapter teams. The rate of return was higher for CLAs (83%), but very similar across the other two roles (LAs: 65%; REs: 66%) and between developed (68%) and developing country (67%) participants.

A synopsis of the results that highlights the common themes and key conclusions arising from the comments that are specific to the future work of IPCC was prepared and submitted by the WGI Co-Chairs to the IPCC Task Group on the Future of the IPCC. The synopsis of the results of the WGI questionnaire is included as Appendix A. A more detailed synthesis of the results including a summary of the responses and comments on all questions is available from the WGI AR5 website www.climatechange2013.org.

3. WGI AR5 Communications and Outreach

WGI AR5 communication and outreach activities are on-going and include production of outreach materials, updates to the website, presentations to the policy and science communities, and participation in outreach activities.

3.1 WGI AR5 Communication and Outreach Materials

The WGI AR5 Summary Volume—containing the Summary for Policymakers, Technical Summary, Frequently Asked Questions and Glossary of the WGI AR5—has been produced and printed copies are available from the IPCC Secretariat. Translation of the Summary Volume into the UN languages was completed in July. Electronic copies are available from the WGI and IPCC websites and hardcopies are available from the IPCC Secretariat.

As was successfully done by WGI for the AR4, a separate brochure of the Frequently Asked Questions was also produced. In addition to the printed copies provided by the WGI TSU, electronic copies are available from the WGI AR5 website www.climatechange2013.org.

Following the production of the WGI AR5 DVD, a USB has been produced that includes not only the full report and supporting materials included on the DVD, but also provides the WGI AR5 Summary Volume in all six UN languages as well as the WGI AR5 FAQ brochure. USBs are available from the IPCC Secretariat.

Finally, the WGI AR5 video continues to be well received and subtitles in the other UN languages are currently being added. These versions are expected to be launched soon.

3.2 WGI AR5 Communication and Outreach Activities

WGI AR5 communication and outreach events are on-going and include presentations or special sessions at major scientific meetings, presentations to science academies, side events at regional meetings, national outreach events in cooperation with the national IPCC Focal Points, and presentations to the international policy community. Since the last IPCC Panel Session, special mention should be made of the Union Session and three Climate Sessions that they was convened on 30 April for the European Geosciences Union General Assembly in Vienna, the presentations made at the 40th Session of the Subsidiary Body for Scientific and Technological Advice in Bonn in June, the presentation to the WMO Executive Council in Geneva on 19 June, and the presentation made at the UN Climate Summit in New York on 23 September.

The WGI Bureau and the WGI AR5 Chapter teams have played a major role in communication and outreach on WGI AR5 to many levels of society and all around the world. Recent highlights include in a series of cross-WG IPCC outreach events organized with the IPCC Secretariat that are described in some detail in the report by the IPCC Senior Communications Manager (IPCC-XL/Doc. 9).

Additional information on the communication and outreach activities in support of the WGI AR5 is available from the WGI AR5 website: www.climatechange2013.org/press-events/.

4. Meetings in Support of the WGI AR5

The IPCC-WCRP Workshop *IPCC AR5: Lessons Learnt for Climate Change Research and WCRP* was held from 8–10 September at the International Space Science Institute in Bern, Switzerland. This workshop, co-sponsored by IPCC WGI and WCRP, was attended by 79 participants. Many of the

scientists in attendance were authors of the AR5 or leaders of WCRP activities, including the six WCRP Grand Challenges. A focus of the workshop was on new research and studies published since the IPCC report. The workshop provided an opportunity for the experts to review lessons learned from the Working Group I assessment and to discuss how those lessons learned would best feed into the WCRP activities and help refine the priorities for up-coming research projects. In this context, the participants also discussed the latest climate change research and studies published since the IPCC report.

A report of the workshop is currently being produced and is expected soon.

Additional information on meetings and workshops organized in support of the WGI AR5 is available from the WGI website: www.ipcc-wg1.unibe.ch/meetings/meetings.html.

5. Synthesis Report

Working Group I is actively involved in the development of the Synthesis Report. In support of the physical science basis, the Synthesis Report Core Writing Team includes ten authors and three review editors from the WGI AR5 author team, as well as the WGI Co-Chairs and the Head of the TSU. Two of the WGI authors are serving as co-facilitators for Topics 1 and 2.

Since the last report, WGI has participated in the two Core Writing Team Meetings held in April and July. The WGI Core Writing Team members have been engaged in the writing of the Final Draft, in providing graphical support in the drafting of figures and in the development of the Glossary. A number of additional WGI authors are actively involved and contributing to the Synthesis Report in cross-WG related topics. WGI is currently preparing for upcoming approval plenary and the subsequent outreach and communications activities.

WGI Questionnaire for WGI AR5 Authors and Review Editors

Synopsis of Results

Submission of the WGI Co-Chairs to the IPCC Task Group on the Future of IPCC

Introduction

On 25 April 2014, the IPCC WGI Co-Chairs and Technical Support Unit (TSU) invited all WGI Coordinating Lead Authors (CLAs), Lead Authors (LAs) and Review Editors (REs) to complete an online questionnaire about their experience of working on the WGI contribution to the IPCC Fifth Assessment Report (AR5), their views on the scope, size and frequency of IPCC assessment reports, the scale of the task, the assessment process itself and cross-WG interactions.

The questionnaire contained a combination of multiple-choice, scaled and open-ended questions that allowed the authors to critically assess their experience in the activities of the last four years and to express their opinions about future assessments. It was anticipated that the results and feedback received would not only provide valuable learning for the next IPCC Co-Chairs and TSUs working with the WGI community, but also help inform the work of the IPCC Task Group on the Future of IPCC. This document provides a synopsis of the results and highlights the common themes and key conclusions arising from the comments that are specific to the future work of IPCC.

The WGI AR5 team included 255 experts serving as CLAs (29), LAs (176) and REs (50). Of the 255, 47 are women and 60 reside in developing countries. A total of 172 questionnaires were submitted, which is 67% of the combined total for the chapter teams. The rate of return was higher for CLAs (83%), but very similar across the other two roles (LAs: 65%; REs: 66%) and between developed (68%) and developing country (67%) participants.

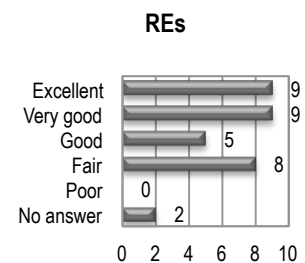
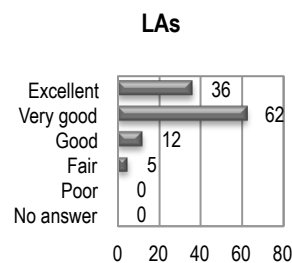
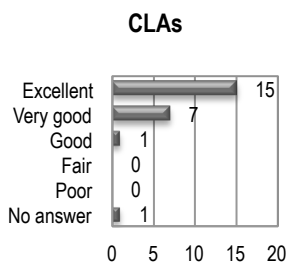
All responses were anonymous with the identifying information limited to chapter, role and country of residence. WGI Bureau members were requested to fill in the questionnaire considering their role as an RE, rather than their broader Bureau role. Where possible, feedback submitted as 'general comments' has been incorporated into the relevant subsection summaries. All pie charts are given based on the total number of respondents (100%=172). All bar charts are given in absolute numbers.

Section 1: Experience of Working on the WGI AR5

This section included questions about their experience working on the WGI AR5, the best and most challenging aspects of it, how it could have been improved, and if they would be willing to do it again.

Please rate your overall experience working on the WGI AR5.

The overall experience working on the WGI AR5 was a positive one, with 138 of the 169 respondents describing it as excellent or very good and none rating it as poor. *(right)*¹ When the responses were considered by role, the results indicated that those who were less satisfied with their experience were more likely to be an RE, with 62% of the fair ratings coming from that group. However, there was a wide range of response within the role as well. *(below)*²



Authors and REs alike from all backgrounds and levels of expertise appreciated most the opportunity to work with colleagues from around the world, to engage in lively scientific discussion often of difficult topics, to learn from one another, including by being exposed to different areas of science from their own, and to be part of an activity with a worthwhile product of value to society.

The most challenging aspect mentioned most often—even by those who rated the experience as excellent or very good—was the sheer amount of work involved and the challenge of managing the time to meet the demands of the work on the assessment and their normal work and other responsibilities. In addition, the review process, and specifically the very large number of review comments received, was also cited by many respondents as being the most challenging aspect of their experience. Many REs also voiced frustration with their limited role and/or the constraints of the process as the most unsatisfactory aspect of their experience.

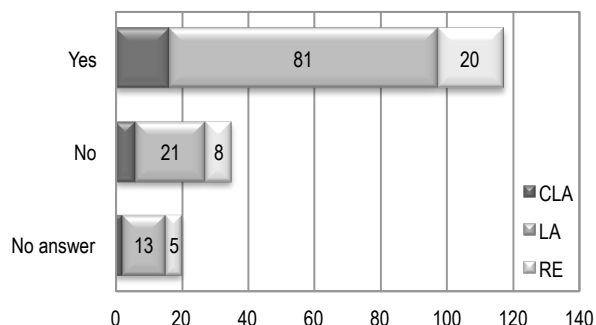
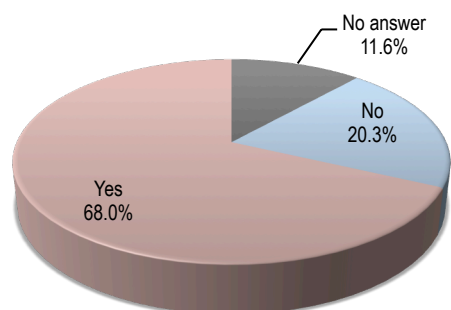
The most consistent comment for improving the experience was a call for more support for authors to help alleviate the increased workload. In addition, varying suggestions regarding changes to the review process were made (e.g., more focused review comments, better defining an ‘expert reviewer’, or the introduction of some sort of screening of comments). Several REs suggested re-defining or clarifying this role to allow for more direct involvement with the content (e.g., being able to review the chapter).

¹ All pie charts are given based on the total number of respondents (100%=172).

² All bar charts are given in absolute numbers.

Given what you know now, and assuming that the mode of operation and procedures defined by IPCC were the same, would you be willing to serve again as a WGI CLA, LA or RE?

Overall the response to this question was positive, with significantly more of the 152 respondents reporting that they would be willing to serve again (117) than not (35) (*left*). When the responses were considered by role, LAs were slightly more willing than CLAs or REs to agree to serve again. (*right*)



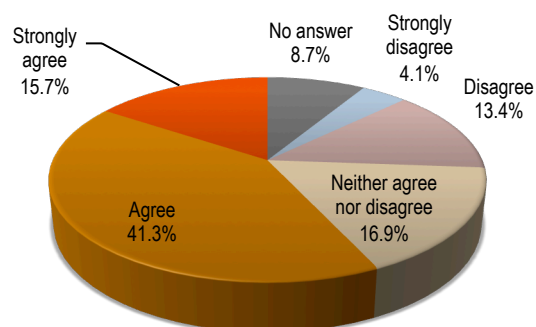
Of those who said that they would not be willing to serve again, several noted that they had been involved in more than one assessment cycle already and felt that it was time to step back to allow fresh people in. However, a number of respondents cited the burden of work in addition to their day job, in particular where there is little support from their home institution or government. Some respondents called for changes in the procedures before continuing, whether it be by reconsidering the WG structure, reducing the size and limiting the scope of the WG reports, or reconsidering the deliverables and their timeline. Even among those who would do it again, some reservations were expressed due to the time commitment required and the lack of support by their governments or home institutions. Those who chose not to provide a definitive answer to the previous question stated they were either undecided or their return would be contingent on a change in procedures (e.g., the role of RE) or an assurance of support from their government or home institution.

Section 2: Report Scope / Size / Frequency

This section included several issues relevant to the future of the IPCC, including the structure of the WGs, future products and the timeline for their development. The options and questions were developed based on the recent discussions within the IPCC Panel Sessions and its Task Group on the Future of IPCC.

The current IPCC assessment structure with three Working Groups (WGI: The Physical Science Basis, WGII: Impacts, Adaptation and Vulnerability; WGIII: Mitigation) is still the best option to fulfill the task given to IPCC.

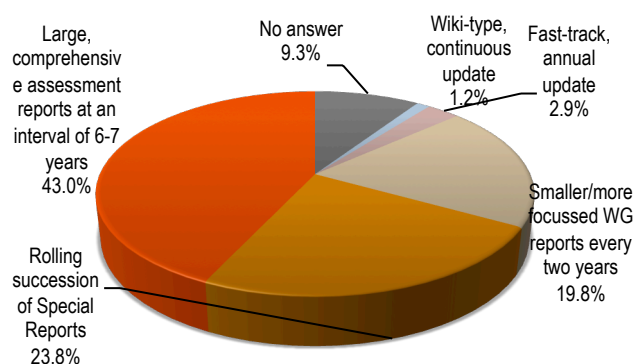
Of the 157 respondents, many more respondents agreed (98) than disagreed (30). Of the respondents in support of the current structure of three WGs and providing comments, some still expressed the need for more end-to-end assessment involving more than one WG and/or strengthening cross-WG cooperation.



For those disagreeing with the current structure, the most frequent suggestion—if continuing with a long assessment cycle—was to combine the impacts part of WGII with WGI and/or to merge adaptation and mitigation.

What is the best timing and frequency of the IPCC report cycle from a WGI science community perspective?

The 156 responses covered the full range of options proposed (see chart). Those supporting large, comprehensive assessment reports at an interval of 6–7 years commented on its impact on policymakers and public, the opportunity for intense interaction between scientists and governments that probably could not be sustained on a more frequent timeline, the need for a certain period of time for scientific topics to mature and new research to be published, and the requirements of the coordinated modelling efforts. Several suggested narrowing the focus, often stating that the scope of the reports has grown unnecessarily large.



Several respondents suggested that the intervals between comprehensive assessments could expand up to 10–12 years and combining this longer comprehensive assessment cycle with more focused interim reports or a rolling succession of Special Reports. Some respondents suggested that an assessment cycle consisting of Special Reports could be concluded with a technical summary or synthesis report from the Special Reports produced during that cycle to further support this choice. Others proposed exploring the possibility of producing a series of cross-WG regional assessments, which could replace or be out of phase with the full reports.

Respondents preferring smaller, more focused WG reports every two years recommended that these should be cross-WG thematic assessments. Some supported the principle of smaller, more focused WG reports but felt that a two year interval was too short. Others proposed specific topics where the science supported the pace, and that this could be done in combination with a longer—10 to 12 year—comprehensive assessment cycle.

There was little support for fast track annual updates and those who selected this option saw this only as an addition to the current structure rather than a replacement, noting that it should be combined with either Special Reports or the traditional comprehensive reports. Some cautioned that there might not be enough new findings to make an impact and others noted that there are many other organizations doing annual reports on climate change. The two respondents who chose the Wiki-type, continuous update provided no additional comments. However, several respondents who selected another choice raised concerns that high-frequency reports or Wiki-type continuous updates would present challenges of ensuring rigor, balance and quality.

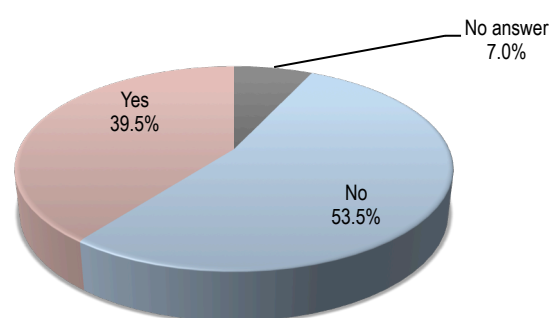
Section 3: Scale of the Task

This section focused on the report production process, including the scale of the assessment (i.e., literature and data) and the amount and type of support received.

It is clear from the responses to the questions and the comments received that the amount of literature to be assessed and the amount of data to be processed/assessed was considered a significant challenge. Furthermore, many authors expressed concern for the ever-growing amount of data and literature becoming available and the ability to provide a comprehensive assessment in the future. When considering the coverage of peer-reviewed literature in languages other than English, authors from all regions noted an increased awareness, availability and inclusion of peer-reviewed literature in languages other than English, but that it also needs to remain a priority. There was general support for making available the data underlying the figures published in the assessment, but comments were split between those who supported it in the interests of transparency and those who disagreed based on practical considerations including resources.

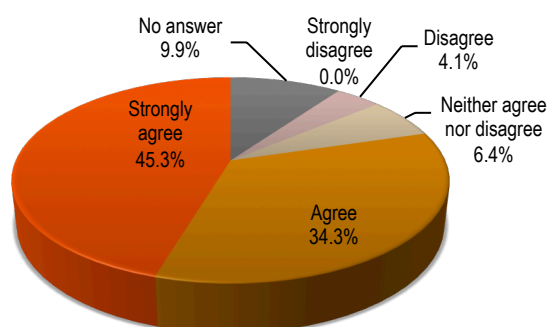
Did you receive assistance for your role on WGI AR5?

Of the 160 responses, 92 said no and 68 said yes (*right*). The most common assistance noted was specific to the travel funding provided to attend the meetings. Many authors received funding in varying amounts to free up time to work on the assessment or a tacit agreement from superiors to do so, or were freed of certain duties (e.g., teaching). Only 7 CLAs and 3 LAs reported partial or full support from the nominating government or home institution in providing an assistant or post-doc who supported one or both CLAs, the LA, or served as an assistant to the chapter.



Dedicated assistance for CLAs should be a standard approach in future assessments.

The overwhelming majority of the 155 respondents supported dedicated assistance for CLAs, with 136 either agreeing or strongly agreeing. Comments reinforced the need for dedicated support through an assistant or post-doc. The majority suggested that this support come from the nominating governments rather than the home institutions.



Section 4: Process of the Assessment

This section was broken into a number of subsections, focusing on the size and composition of the chapter team, the number and programming of Lead Author meetings, IPCC procedural requirements, the role of the RE and the support received from the TSU.

Chapter teams

Over three-quarters of the respondents felt that the size of their chapter team was 'about right'. Comments on this area focused primarily on the composition and working of their chapter team noted that the largest fraction of the work was done by a smaller fraction of the team. Many comments were made about either missing expertise or redundant expertise, and it was repeatedly suggested that CLAs should have a say in the selection of authors. Some respondents called for more gender or regional balance. Others suggested that more focus be placed on bringing younger scientists (i.e., in their 30s and 40s) into the process, while others voiced frustration over chapter members being selected for reasons other than scientific expertise.

Lead Author meetings

Over three-quarters of the respondents felt that the number of Lead Author meetings was 'about right'. Comments on this area focused primarily on the location of meetings, with most respondents suggesting that meetings be held only in destinations where there are airports with intercontinental flights.

IPCC procedures

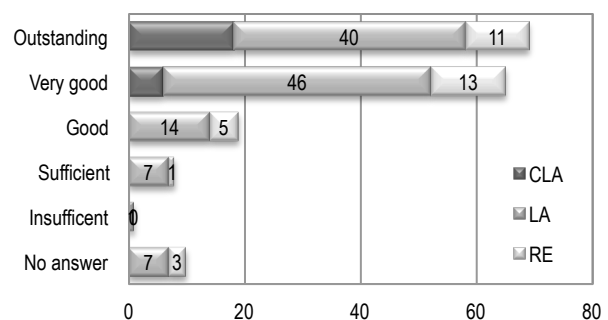
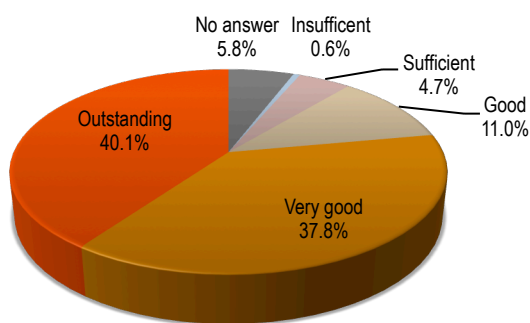
In general, respondents were neutral or did not consider the IPCC procedural requirements as a burden or of limited benefit. Those providing additional comment saw them as mostly necessary to ensure transparency and quality assurance. However, the review process did receive a number of comments voicing concern and the need for amendment. Authors noted difficulty with the sheer number of comments received and the requirement to provide responses to each one. It was suggested by some that either the requirement to respond to every comment needed to be reconsidered and/or a higher standard needed to be defined for an individual to serve as an expert reviewer.

The role of the Review Editor

Some very strong opinions were expressed on the role of the Review Editor. Many authors and REs alike expressed the view that the role needed to be revised or eliminated. Many thought that the senior experienced people appointed as WGI AR5 REs were underused, and several respondents suggested that the REs could perhaps be brought in earlier. Many REs voiced frustration over the limited role and felt that the REs should have a role in shaping the content of the chapter, with several suggesting that they should be able to review the chapter. A number of comments proposed that the REs should act more like a journal editor and have the final say on a chapter. However, many authors felt that the REs were not useful, with several authors commenting that the REs were more of a hindrance than a help, and that some of the REs pushed their own views too much.

Technical Support Unit

Please rate the overall support that you received from the WGI TSU throughout the AR5 cycle.



Of the 162 responses received, the overwhelming majority of respondents (134) rated the support they received from the TSU during the AR5 cycle as outstanding or very good.

Comparing the responses by role resulted in slightly more favorable response from CLAs, with no CLA rating the TSU support less than very good.

Relatively few suggestions for improvement were received, but multiple authors suggested that they and the assessment would have benefited from dedicated graphics assistance. Others suggested the development of improved tools to support the assessment process, noting difficulties with references/EndNote and/or the challenges of drafting text with multiple authors.

Section 5: Production of the Technical Summary and the Summary for Policymakers

This section focused entirely on the internal production of the Technical Summary and Summary for Policymakers. The majority of respondents rated their experience with Technical Summary and Summary for Policymakers as positive. However, although multiple respondents commented on the importance of the Summary for Policymakers and the overall high quality of the final product, many comments were received questioning the need for a Technical Summary, citing the additional burden to produce a product that was not seen as particularly essential or useful.

Section 6: Cross-Working Group Interactions

This section focused on cross-WG collaboration. Individual experiences with cross-WG collaboration ranged widely, but more than half of the respondents rated their experience as absent or difficult. About three-quarters of the respondents thought that cross-WG collaboration needed to be made easier or improved. A variety of suggestions were received, with some authors proposing changes to the assessment structure, suggesting that IPCC only do cross-WG assessments such as Special Reports. Many noted the positive experience of the Expert Meetings and Workshops on cross-WG topics. Others suggested having a joint LA meeting for those cross-WG topics identified, while others suggested having authors who work on more than one WG report specific to the cross-WG topics identified.

Section 7: General Comments on the Assessment

In this section, a list of possible topics was provided for general comments on various steps of the assessment process. Comments were received on a wide range of topics. Where possible, feedback submitted as general comments has been incorporated into the relevant sub-section summaries above. The text below is a synthesis of the other main comments submitted but not summarized elsewhere in this synopsis.

Scoping and nomination process

Several respondents considered these steps to be the least transparent of the IPCC assessment process. It was noted by some that this may arise because of a disconnect between the national IPCC Focal Point and the scientific community in a country and/or because the authors drafting the report are not necessarily involved in the scoping of it. Some suggested that more flexibility should be provided to the authors to adapt the scope/outline during the drafting process to allow for changes due to unforeseen difficulties or the evolving science.

Writing of WGI AR5 (including cross-cutting issues and FAQs)

Respondents commenting on cross-cutting issues were consistent in their suggestion that these needed to be coordinated better, identified sooner in the process and authors involved earlier to ensure adequate coverage. Respondents commenting on the FAQs provided almost exclusively positive feedback, noting their importance and/or praising the support received from the Science Editor and the TSU.

Review process

This topic received the majority of comments. Many respondents expressed concerns over the increasing number of comments received, the resulting workload and the inadequate quality of many of the review comments received. The number of comments received and the requirement to provide a response to all comments was considered a major frustration and an unnecessary drain on their time given the relatively few high-quality comments often received. Pleas for changes to the procedures were made, suggesting that either authors be allowed to not respond to non-substantive or unsubstantiated comments or the standard required to submit a review be increased. Several suggested that the reviewers should be selected with the same standard of scientific expertise as the authors are. A few suggested that comments could be sorted by either the TSU or REs, with editorial and non-substantive or unsubstantiated comments being removed and answered by the TSU and REs respectively.

WGI approval process (including CLA pre-meeting and the preparation for the approval session)

Few comments were received on this component. Of those providing comments, many stated that this was overall a challenging but positive experience and that the pre-meeting and approval session were well organized. A few voiced concern over the role of governments and their ability to change text or delete content.

Post-approval production process (i.e., copyedit, error correction, layout)

This section received few comments, but some did voice frustration at the time commitment still required of them post-approval.

Communications and outreach on AR5 (both WGI and IPCC in general)

Of those submitting comments on this topic, many voiced appreciation at the increasing focus on outreach and communication, but thought it could be further strengthened. A few suggested that post-SPM release activities could be more formalized or better coordinated across the regions. Several authors noted that the Headline Statements, the SPM and the FAQs were useful resources. The media training was received positively and some suggested this activity be expanded. The press conference received some criticism, with some commenting that it could have been set-up or managed better. There was a call for more outreach in developing countries, including more cross-WG events/activities.

Conclusion by WGI Co-Chairs and TSU

The questionnaire was well received and many authors clearly committed significant time to provide feedback. The results and comments provide three common themes that may be relevant to the IPCC Task Group on the Future of IPCC.

1. **The workload and the need for additional support for CLAs and LAs.** The most challenging aspect of producing an assessment report is the sheer amount of work involved and the challenge of managing the time to meet the demands of the work on the assessment and the normal work and other responsibilities expected of our experts serving as LAs and CLAs. The scope of the assessment reports continues to expand. The amount of literature to be assessed and data to be analysed continues to grow (e.g., in AR5 the authors assessed more than 9200 scientific papers and analyzed over 2 Petabytes of numerical data). The chapter page lengths and the number of review comments are at an all time high. The focus on post-approval outreach and communication has resulted in an overall longer time commitment to the assessment cycle for authors. As the time commitment required to produce an assessment report has grown, the support has not. What has remained constant is the need for rigor, robustness and transparency. To ensure the quality of the reports and the health of our authors, serious consideration must be given to providing additional support for the authors volunteering their time, and in particular, to CLAs. Dedicated assistance, through the provision of an assistant or post-doc for CLAs should be considered to become a standard approach in future assessments.
2. **The review process.** Concerns were voiced in several subsection topics over the increasing number of comments received and the resulting workload required to provide a response to each. This aspect has become a major frustration due to the increased amount of time required to respond to the very large number of comments (54,677 for the WGI report, TS and SPM), in particular given the number of non-substantive comments submitted. This aspect of the assessment process needs to be considered and effective changes could be envisaged that would allow authors to not respond to non-substantive or unsubstantiated comments and/or that would ensure that the experts submitting a review have similar standards and scientific expertise as the authors.
3. **The role of the REs.** Although not all REs voiced discontent with the role and some REs specifically commented on the understanding and need for their specific and limited role, a large number of REs responding to the questionnaire (and some CLAs and LAs) expressed concern or dissatisfaction with the role, questioning the general usefulness of the role as currently defined. Many REs suggested that the role be expanded to allow for either more "control" over the content of the chapter or the ability to submit their own reviews of the chapter. However, many authors voiced concern beyond the usefulness with the role, with several commenting that the REs were more of a hindrance than a help and that some of the REs pushed their own views. The role of REs in the assessment process could be reviewed and consideration could be given to defining this role better or differently.

It should be stressed that although the purpose of the questionnaire and the focus of this synopsis is on improving the process and the experience for the authors, overall respondents used this questionnaire to not only provide valuable feedback and constructive criticism, but also were clear in their compliment expressing their appreciation for the support received from the Co-Chairs and TSU and commenting that their overall experience in AR5 had been challenging, but equally rewarding.